PATENT SPECIFICATION

806,084

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International Classification:—A47l.

COMPLETE SPECIFICATION

Improvements relating to Suction Cleaners

We, HOOVER LIMITED, a Company registered under the Laws of Great Britain, of Perivale, Greenford, Middlesex, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to suction cleaners of canister type and is concerned with means for accommodating the cleaning tools of such a cleaner when not in use.

According to the present invention, a suction cleaner of vertical canister type having a base and a casing which can be raised from the base is provided with a tool carrier comprising a curved support which is shaped to extend round at least part of the body of the cleaner and which can be detachably fitted into and held between the base and the casing of the cleaner, and a number of brackets shaped to support cleaning tools projecting upwards and outwards from the curved support.

In one form of the invention the base of the cleaner has an outwardly projecting wall and the tool brackets have shoulders resting on the said wall.

The base of the tool carrier may be of arcuate form, and the upper part of the base of the cleaner may be of annular form with the base of the tool carrier, which may be of wire, fitting inside it.

A modification of the invention covers a specific form of tool carrier *per se*, namely a tool carrier comprising a generally arcuate base formed of wire, and, projecting upwardly and outwardly from it, a number of brackets shaped to support cleaning tools.

The invention may be carried into practice in various ways but one specific embodiment will be described by way of example with reference to the accompanying drawings in which:—

Figure 1 is an elevation of a suction cleaner with the tool carrier in position, certain parts being shown in section,

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Figure 2 is a fragmentary section through the hinge of the suction cleaner base,

Figure 3 is a perspective view of the tool carrier detached from the cleaner, and

Figure 4 is a fragmentary plan view of the cleaner base with the tool carrier in position, certain parts being shown in section.

In the embodiment shown the tool carrier is designed for and applied to a suction cleaner including a circular base 10 and a generally spherical casing 11 having a top inlet 12 for dirt-laden air and an exhaust outlet 13 opening into the base. Within the casing are a filter 14 and a motor-fan unit 15.

The circular base 10, which is hinged to the casing, is formed from a top ring 16 and a bottom plate 17 having a skid surface 18 to rest on and slide over a carpet. The top ring 16 has an inner horizontal flange 19 resting flat on the bottom plate, an annular vertical inner wall 20, an upwardly and outwardly sloping wall 21 and a downwardly and outwardly sloping wall 24 meeting the outside edge of the bottom plate 17. Thus the base provides a recess 22 to receive the bottom portion 23 of the spherical casing.

The vertical wall 20 of the base has in it a number of openings 25 leading into the annular chamber 26 which is enclosed between the top ring 16 and bottom plate 17 of the base, and which contains sound-deadening material 27.

The base and casing are interconnected by a hinge 30 and a latch 31 allowing the casing to be raised from the base to expose the recess 22 in order that a hose coupling may be inserted in the exhaust outlet 13 for cleaning by blowing. A number of resilient buffers 33 are secured to the upwardly and outwardly sloping wall 21 of the base so as to engage the casing and hold it away from the base to provide an annular clearance gap 34 through which air can escape upwards and outwards.

The tool carrier in accordance with the invention is formed of stout wire and, as shown in Figure 3, comprises an arcuate base 36 subtending an angle of about 180° and having its

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opposite ends 37 and a central portion 38 joggled or outwardly offset from the circle on which the remainder of the base lies, as indicated at 39. The base carries three tool supporting brackets 40 each also formed of stout wire and of generally U-form. Each bracket has its ends 43 welded to the arcuate base 36 whence each limb of the U has a vertical portion 44, an upwardly and outwardly sloping portion 45, a downwardly and outwardly sloping shoulder 46 and an upwardly and outwardly sloping portion forming a U-shaped spigot 47 for insertion into cleaning tools shown at 48, 49 and 50.

The tool carrier is attached to the cleaner by releasing the latch 31 and swinging the casing 11 away from the base 10 about the hinge 30 to uncover the recess 22. The curved base 36 of the tool carrier is then inserted in the recess 22 with two of the brackets 40 on opposite sides of the latch 31, and is sprung inwards to enable its opposite ends 37 to be inserted into two of the openings 25 in the vertical wall 20 of the base. The tool carrier is then swung down into the recess 22 and its central offset portion 38 is sprung into another of the openings 25 to retain it in the cleaner base.

The tool carrier nests in the base 10 with the upwardly and outwardly sloping portions 45 of the brackets resting on the corresponding wall 21 of the base, and the shoulders 46 of the brackets resting on the wall 24 of the base, whence the U-shaped spigots of the brackets project upwards and outwards as clearly shown on the left of Figure 1. The portions 45 of the brackets extend through the annular clearance gap 34 between the base and the casing and accordingly do not interfere with the closing of the casing on to the base. The cleaning tools are then placed over the U-shaped spigots of the brackets, and their ends 51 rest on the shoulders 46, so that the tools are conveniently moved or carried with the cleaner but are readily available for use as required.

WHAT WE CLAIM IS:—

1. The combination with a suction cleaner of vertical canister type having a base and a casing which can be raised from the base, of a tool carrier comprising a curved support which is shaped to extend round at least part of the body of the cleaner and which can be detachably fitted into and held between the base and the casing of the cleaner, and a number of brackets shaped to support cleaning tools projecting upwards and outwards from the curved support.

2. A combination as claimed in Claim 1 in which the base of the cleaner has an outwardly projecting wall and tool brackets have shoulders resting on the said wall.

3. A combination as claimed in Claim 1 or Claim 2 in which the base of the tool carrier is of arcuate form.

4. A combination as claimed in Claim 3 in which the upper part of the base of the cleaner is of annular form and the base of the tool carrier fits inside it.

5. A combination as claimed in any one of the preceding claims in which the base of the tool carrier is formed of wire.

6. A combination as claimed in Claim 4 and Claim 5 in which the ends of the base of the tool carrier fit into openings in the inner wall of the annular part of the base.

7. A combination as claimed in Claim 6 in which the base of the tool carrier has a projection at an intermediate point which is sprung into a recess or opening in the inner wall of the annular part of the base when the ends have been inserted into openings in the said wall.

8. For a combination as claimed in any one of the preceding claims, a tool carrier comprising a generally arcuate base formed of wire, and, projecting upwardly and outwardly from it, a number of brackets shaped to support cleaning tools.

9. A combination with a suction cleaner of a tool carrier as specifically described herein with reference to the accompanying drawings.

10. A tool carrier for a suction cleaner as specifically described herein with reference to the accompanying drawings.

KILBURN & STRODE,
Agents for the Applicants.

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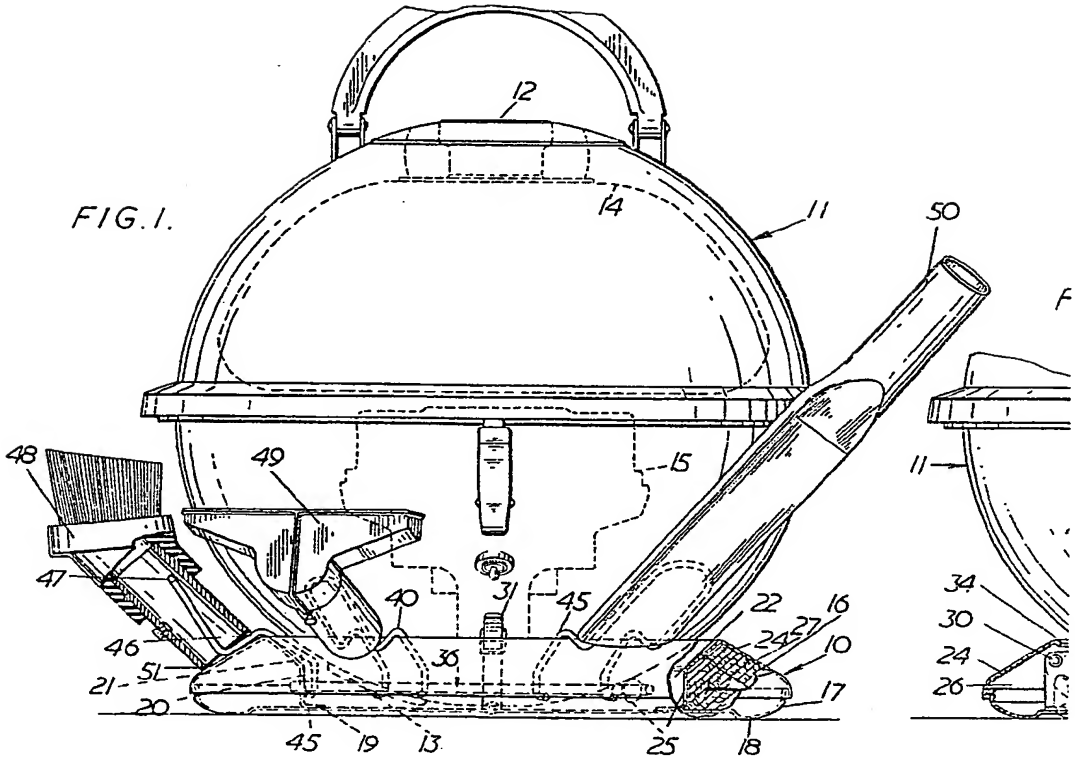
FIG. 1.



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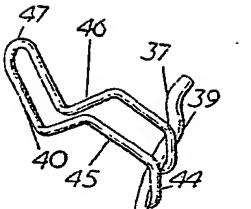
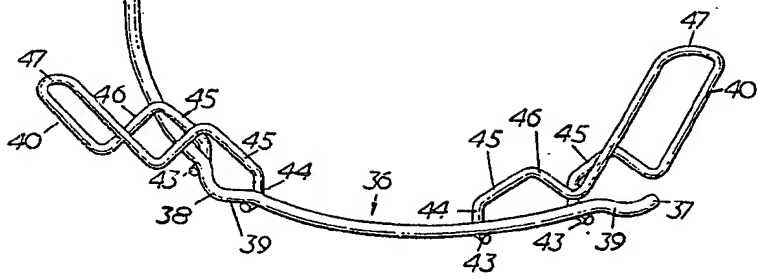


FIG. 3.



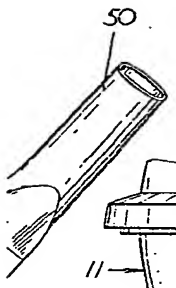


FIG. 2

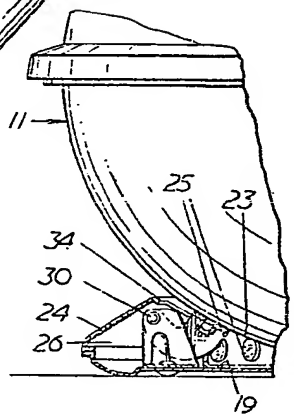


FIG. 4.

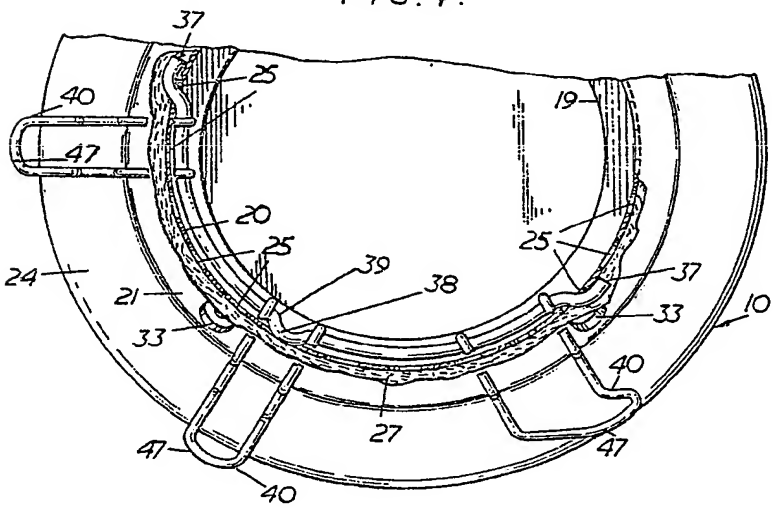


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FIG.1.

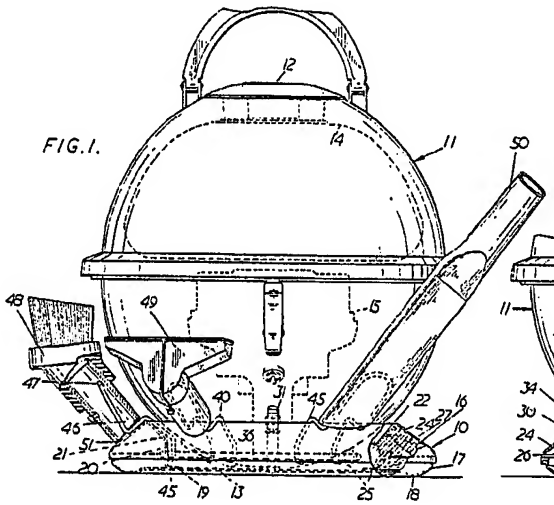

FIG.2

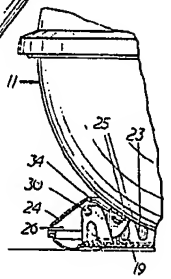

FIG.3.

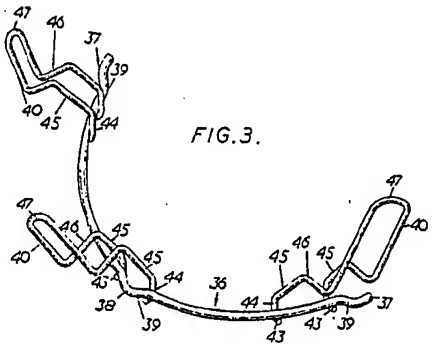

FIG.4.